

DR. CARL LEOPOLD AT "THE SHACK"
Baraboo, Wisconsin
By Buddy Huffaker and Steve Swenson
September 11, 2003

MR. HUFFAKER: This is oral history about Aldo Carl Leopold. September 11, 2003.
At the Leopold Shack and Farm.

DR. LEOPOLD: Why don't I start by reading some out of my journal from back in 1935? It is kind of fun looking at something from that far back. The journal is carefully printing out The Trip to the Elams. The row of Elm trees that used to be right here where there used to be a driveway coming in to the place is all elms. Of course they are all dead now, but the neighbors called them 'elams'. So that was a family joke; we always talked about the 'elams'. This is "The Elams". The first page is a checklist, very systematic, for three men for five days of all these things that we brought. On the second page the narrative begins.

[Reading] "We finally got off, there was always difficulty getting away from the house. The last minutes things and getting them into the car. Dad would be sitting in the car, waiting to go with his hat on and his hands on the steering wheel; waiting. We all had to hurry. We finally got off, and after some time we bought some lumber; 2 x 4s for the roof and the car house. We arrived at about noon. There was less water in the small slough than last time. We commenced to prepare the car house for moving. After the doors were off, we jacked it up off of the old, rotten wooden skids. We stuck rollers underneath it."

I had forgotten that we had moved this building! Son of a gun!

"After prying and pushing in a hopeless way; we decided to try pulling it with the car. After bracing and figuring, we moved it about a foot closer to the shanty and we finally gave up and tore it down. We started laying the foundation and decided to make the bunkhouse smaller than the car house was."

I am a little unsure about what "car house" means. It sounds as if it were essentially a structure that we used to build the bunkhouse.

MR. HUFFAKER: That's what Sarah has been finding out.

DR. LEOPOLD: Sarah mentioned that.

MR. HUFFAKER: Sarah found in the documentation that it was maybe further to the east and you moved it over. Then you used a part of it.

DR. LEOPOLD: You know, I really draw a blank on that. But right there it is, in righting!

"Luna made cornbread for supper." And here is the recipe, " a cup of flour, a teaspoon of salt, etc. We heard snipe winnowing all afternoon. They sure do make a weird sound. We also heard partridge drumming across the river. There are owls affording some dinner music. All during the trip a little phoebe sat and scolded us. She wanted to nest in the shanty. We had the west wall partly down and she would fly right in and scout around. Of course there were lots of crows."

[A different page of journal] Oh, this is Fred Sommes and I! This is called The Weeks Trip to the Elams, Fred Sommes and A. C. L. June 15, 1935.

“On Saturday morning Fritz, (that’s Fred) and I crowded into the back seat of our little Chevy with all of the truck, bedding and tools, flick and all of the accessories. Fred was very much pleased with the layout, much to my pleasure. After arriving, we ditched Estella, (poor Estella) who along with Daddy and Mother had brought us. We went swimming in the river. We came back and found our elders making a seat in the front yard.” That’s what we called the “Leopold Bench”, no doubt. “When that was done, they left. We ate supper of spaghetti, ham, toast, carrots and milk.” I love this journal! It’s got everything we ate. That’s very important! “It sure was good! During the day while we were swimming, we caught a turtle, which we called Florence Josephine Napoleon, “Nap” for short. After being left in the tub, he up and left. I guess that’s just because he didn’t appreciate us.”

[Third page from Journal] This is an entry from 1939, February. That would put me at about 19 years old. I started the entry with a list of all of the people that were present with us. Here is the entry.

“We had a terrible shock when we arrived today. When we first saw the shack we knew something was wrong because the door was open. Someone broke in and had no intension of stealing, but simply raised hell. All of the dishes, cups and so forth were smashed. The utensil box, and all of them in the fire. All of the pails had holes chopped in the bottom. One bucket was burned. Everything destroyed, down to the knife holes in pots, which had escaped the axe. Luckily, the journal and the beds were intact. The mantelpiece, unfortunately, suffered rather severely. The big saw, and the axes were gone. There was no reason for the raid, as so little was stolen. But special care was taken to destroy everything. Of course, we couldn’t stay here. We cleared up as well as we could and came home, crushed. Strangely, the padlock was open and intact; the key was in place. There was no sign of force on the door.”

Remembering this situation, we all cried. Everybody was sitting around weeping. When we got home, Dad said, “You know, the really good thing about this is that it showed how you all love the place!” Of course, he was right.

MR. HUFFAKER: Carl, maybe we’ll start by just building on those journals there. There are really beautiful.

DR. LEOPOLD: There were careful lists of everybody that was on a trip using the same system of initials of everybody that was there. Estella made a list of everything that she should take along. It was a sort of recounting. And it was sort of an absolute take off what Dad characteristically did for any trip.

MR. HUFFAKER: But if I remember correctly, his journal entries were a little bit more to the point, if you will, and not so narrative.

DR. LEOPOLD: Yes, well that’s true. He paid much more attention to the natural history details, whereas this is more a description of what we did and what happened.

MR. HUFFAKER: Do you continue to keep a journal?

DR. LEOPOLD: Yes, my wife Lynn and I keep a journal of events at our house in Ithaca, New York. But it’s not anything like this. It’s just for when we feel like sitting down and recording what’s going on. Then we’ll spontaneously make an entry.

MR. HUFFAKER: One of the really intriguing and informative aspects of the journals is the insertion of your own photographs. How did you get into photography? And when did that take off as a passion of yours?

DR. LEOPOLD: It was a point in time that is easily identified. My father came home from Germany in 1934. He had been on a visit to Germany to look at their National Forests. He came home, and you may have seen this photograph of him, he had on wool knickers and a matching hat and jacket. Around his neck were his new, Zeiss binoculars. Around his shoulder was the strap of his new Zeiss Counterflex camera. Well, I fell in love with that camera and there was no separating me from it, every since. I helped form a Camera Club at our high school. Everybody in the club was just crazy about taking photographs. My camera was probably the best one in the lot.

MR. HUFFAKER: Was there any competition between the other siblings about who became the family photographer, or were you bestowed that honor?

DR. LEOPOLD: No. Should I say it? I captured that honor from the beginning!

MR. HUFFAKER: You seemed to have done a great job on integrating your own school work in to your own personal interests. For example, the extensive herbarium collection that you generated for this property, it's my understanding that it as roots in a school project as well.

DR. LEOPOLD: It did. And actually, as you have pointed out, it's really quite a valuable asset to the historical changes that were going on here. It began when I took Professor Norman Facet's course called, "The Spring Flora of Wisconsin". As a project for the course, which a sort of thesis in a way, I made a collection of all of the plants that I could find on this property.

MR. HUFFAKER: How much time did you spend collecting those?

DR. LEOPOLD: Well, it was every weekend that we'd come up, and that was pretty often. It was really fun because everybody sort of got into it. It was especially interesting I think, to my father, to see the plants identified that he had seen but didn't know what they were. He was very keenly interested in it. That added an additional spark to the experience.

MR. HUFFAKER: Adding to the body of knowledge!

DR. LEOPOLD: Yes, and to my enthusiasm.

MR. HUFFAKER: When did you determine that you wanted to become a Botanist?

DR. LEOPOLD: That's hard to say. I guess Norman Facet had a lot to do with that. As a freshman, I signed up for a course with him at the University of Wisconsin. He had been a long-term friend of my father's. So there was a quick communication with him. He asked me to help prepare a key of some aquatic plants. He was writing a book at the time on the aquatic flora of Wisconsin. So this project here was sort of a natural sequence in learning about the flora of Wisconsin with him. That captured me, and then I took a course with John Curtis who was very distinguished Plant Ecologist there. That did it! That sort of fashioned what I was going to doing in college.

MR. HUFFAKER: Thinking back to the time that you spent collecting those samples, what is the most striking change on the landscape now!

DR. LEOPOLD: Wow! The change is marvelous! Looking back at the early photos and seeing how we all admired the trees we had been planting when they were four feet high, or Dad holding the stem of a pine that was something like eight or ten feet high! Look at these things now they are so gorgeous! That's an easy question to answer. It's part of the sense of a real thrill; coming back here and seeing this restoration work that we did together as a family and how it really bore such beautiful consequential fruit. It's lovely.

MR. HUFFAKER: As I understand it, you had a very hard time initially, getting the trees to actually take because the drought persisted.

DR. LEOPOLD: Yes, the first year when we planted there was a terrible drought in the summer. I think Dad said in his journal that we lost ninety-five percent of the plantings. But whatever it was, it was enormous. Why it didn't deter us, I don't know. But we were out there the next spring, planting pines and hardwoods.

MR. HUFFAKER: You anticipated my question exactly! To think about The Shack now, and its growing importance as a kind of icon for conservation, how has that changed in your own mind? This place, and your own experience in it, and what it means now, not only to you but to so many other people?

DR. LEOPOLD: It really has the quality of a beautiful cathedral, as simple as it is. But it's inspiring to people; not just to the family members like me who might be a little biased, shall we say, with the beauty of this place. Many people are really touched coming here. And as I am sure you know, there is at least one admirer of the whole project here who comes once a year and just sits, not even walking over the property, just meditating and looking and getting a reward from just being here. So it's a marvelous... It's more than an event. It's more than just a little structure that we put together. It was an inspiration. And of course professionally, its inspiration has given rise to this whole kind of project. The whole origin of restoration ecology which now, thanks to Aldo Leopold and his friends at the University is now a national and international branch of ecological and environmental science.

MR. HUFFAKER: Did you have any idea that you guys were embarking on such a journey here?

DR. LEOPOLD: No! We didn't even have a clue what Dad had in mind. We thought this was sort of crazy! It was really quite remarkable to just come in here with this mess. It was a mess. The fields were completely devoid of, almost completely devoid of nutrients. This whole section in front of the cabin; the principal growth on it was sand burs. If you get sand burs in your socks, or in your dog's ears it's a mess. That was part of the transformation. We brought about a complete change from really a trash place into a place of beauty.

MR. HUFFAKER: You've produced an entertaining graph that you have shared with me comparing the citations of some of your own work with that of your father's. I wonder if first you could briefly describe the comparison of what has happened, in terms of *The Sand County Almanac*.

DR. LEOPOLD: The graph that I use in giving talks or seminars about Aldo Leopold are just about ecology. They arose from a book by Thomas Coon who made a very

important contribution to the understanding of science and how it works. He published a book called *The Structure of Scientific Revolutions*. In this book he recognized two different kinds of entries in to the scientific field. One would be a contribution, like an analysis or a piece of experimental work: a contribution in the sense of improving our understanding of some item. In contrast to that, he described what he called a “paradigm shift”. This is a whole new outlook of how science systems work. The paradigm shift, as he defined it is something that changes the orientation of the field that it is defined for; so that in the case of environmentalism, or in the case of ecology, this would be Aldo Leopold’s contribution in first of all, the concept of ethics in environmentalism, and secondly the concept of restoration ecology. So these were two enormously revolutionary ideas in the area of environmentalism. If you ask me to define a paradigm, I would say that first of all, it’s something that lasts a long time. It doesn’t have just a short spurt of interest. It’s lasts a long time. The second thing is that a paradigm would be represented by the formation of new structures in the science. You might have a new scientific society or new sets of theories based on the new paradigm. So I wanted to show this question of the longevity of Aldo Leopold’s contribution in comparison to this ordinary contribution. In my graph then, I used this frequency of a book that I had written. It was a book on plant physiology called *Plant Growth and Development*. As a contribution, it’s a beautiful example of a contribution. After it was published there were quite a few citations of it in the literature. Then the citation frequency fell off, essentially logarithmically, such that in about six years you’ve lost half of the attention. Then in another six years you’ve lost half of that and it would decay over this long curve. Aldo Leopold’s book was published in 1949 and neatly; there was no reference to this book until 1962; twelve years after it was published. There was nothing! Then, these two concepts that he had provided as a paradigm shift began to take hold. The frequency of publication’s citations went up arithmetically. It’s just magnificent. Over the next fifty years! Mine was six years! And over fifty years, the frequency of citation goes up, and I think currently, or the last I could see, in 2001 it was hitting 100 citations a year. So the frequency of citations tells you a story about how important it is, did it last a long time? I think it was really an interesting way to display the characteristic of dynamics that Aldo Leopold provided.

MR. HUFFAKER: How about from a personal perspective? You said that the citations would represent the importance of a concept or a paradigm. How about for you personally? What has *The Sand County Almanac* meant?

DR. LEOPOLD: Let’s see, that’s going to be a tough one to answer. I have to go back a little bit before I answer that and say that I think that from my perception of my father as we were growing up was that he was a very able person. And when he published something it was fantastically beautiful. But any kind of assumption or realization that this was something that was going to be so earthshaking and so moving to people who read it as just an artistic piece of literature. This was outside of anything that I had even dreamed about! It wasn’t until after Dad died and his book came out, and we began to see. First of all, we read all of these things compiled as an orderly sequence, or march through the calendar year. Then, that was when we began to see that the structure was something especially beautiful. I hope I am answering your question, but it came late. I was not very quick about seeing what really was going on.

MR. HUFFAKER: Did you have an impression of how important this book was to your father while he was putting it together?

DR. LEOPOLD: Oh, I think he lived it! And guess what? The Shack was his inspiration. This was his opportunity to really be on the land and really see the details. To follow the skunks through the snow; and listen. So the Shack really amplified this

wonderful quality of strong perception on his part and his real sense of beauty and aesthetics. The fourteen years that he had here on weekends and vacations was, shall we say, the fuel that generated a lot of these beautiful things that he did.

MR. HUFFAKER: How often now do you turn back to *The Sand County Almanac* and read your father's writing?

DR. LEOPOLD: I guess the main thing is that if I have to give a talk on Aldo Leopold, then I usually go back and read some parts of it. A family tradition, which has just moved me very, very much is that my daughter Susan reads the essays from the book to her children as nighttime stories. She'll say, "I'm going to read this one". And it's just beautiful. What a wonderful way to have the children, the progeny of the family, really get the feel and the sense of interest and attachment to these beautiful things.

MR. HUFFAKER: Let me just clarify; she doesn't read *Plant Growth and Development* to them?

DR. LEOPOLD: Oh no!!! I don't think *she* ever read *Plant Growth and Development!* That's a good question!

MR. HUFFAKER: It was probably not fair!

DR. LEOPOLD: That's all right!

MR. HUFFAKER: Did your father ever talk about ethics, or people's relationship to land in terms of his conversations with you or the family?

DR. LEOPOLD: That's a very interesting question, because I am sure that these concepts were really turning around in his mind over a long period of time. He first mentioned it in his literature in 1933. So say from 1933 to 1949, this concept was evolving. Of course this place here, I am sure, had a very profound influence on the evolution of the ethical and aesthetic concepts. But he was quiet about this at home. You could hear him use words of anger about people who did perfectly goofy things with natural resources; and unreasonable game laws that didn't do what they should have been doing. You could hear him getting pretty angry with that. But this is different than him really coming out and saying something expressly about aesthetics, or expressly about ethics.

MR. HUFFAKER: In reviewing the journals, it's really quite impressive how much time you all spent out in the field. Share a little about what it was like to be with your father.

DR. LEOPOLD: We are often asked (any of the siblings of the family); 'How did your father get you so interested in it'? All I can say is that we were interested in it! We were a part of the team. And there was no sense of obligation. When we came out here it was because we wanted to. One of my favorite stories about that is when my girlfriend asked me to escort her to the Prom at the University of Wisconsin. I said, "I can't, I'm going to the shack that weekend." She wasn't very much impressed!

MR. HUFFAKER: One other thing that we noticed in the journals is that you guys would spend a fair amount of time wandering the countryside at large, interacting with the neighbors. It seems like today, people wouldn't think about crossing property lines and things like that.

DR. LEOPOLD: Yeah! That's a very interesting point. Of course the whole flood plain here was almost lacking of people. There was one little cabin just downstream from us. There was really nobody else here. So access to all of the property and the whole Wisconsin River flood plain was easy and inviting.

MR. HUFFAKER: It's somewhat ironic, I mean, in your interchanges with the neighbors that you would encounter, it almost seems like there was more of a sense of community even though there were fewer people as a part of the community.

DR. LEOPOLD: I think you are absolutely right. The neighbors that we did have were much more receptive to being involved with us; or at least understanding what we were doing. I think that the outreach to the contemporary neighborhood is not as easy. I think we need to put more effort in to reaching the local people. I think they think of us as curious. As you know, we've had open house events here for the local farmers. Everybody comes, and they are really interested to see what those "crazy people" doing over there. They can't understand it I guess, not usually. But they are interested.

MR. HUFFAKER: What do you think the future holds for the land ethic?

DR. LEOPOLD: I think it's a transformation. I don't think we will ever outgrow the sense of ethical responsibility to the land. It's so basic to our whole relationship to the natural world. I think that even after Aldo Leopold's book tapers off in terms of citation frequency, it's such an elementary component of environmentalism and about aesthetics and people being emotionally touched by beautiful things in the environment. I don't think it will ever fade out. I think there will be many transformations of it, and all kinds of new expressions of ethical theory of natural history. They appear every few years. And that's fine. I like it, but I think that it is simply an expression of how it's here to stay. It's going to grow. People have somewhat different interpretations or elaborations to make. I think it's here to stay.

MR. HUFFAKER: What gives you the most hope for the future?

DR. LEOPOLD: Do I have hope for the future? [Laughing] I am sorry, that's not nice. I would say that it's going to be a long, up hill battle. I don't know. The extent of the deterioration of our treatment of the land as a human society is very discouraging. Whether the growth in interest in aesthetics is going to fast enough to really have an influence on achieving better interactions with the natural world, I don't know. I think that's what we hope for.

MR. HUFFAKER: Can you share the role that your Mother played in this whole drama?

DR. LEOPOLD: Oh, I am happy to have you ask about Mother! Mother was a real player. She grew up in an elegant, aristocratic family in Santa Fe, New Mexico. This was just about as abrupt a change for a young woman as you could imagine! Coming out here and tromping around in the sand burs. It's amazing! And she loved it! What a source of inspiration she was. You'll see in many photographs; there's Mother with a bucket of trees walking up the sand hill over here. Here's Mother holding the trees while Dad is kicking in the soil. She was right there. Dad did a lot of the cooking at the shack, but Mother would usually have a very strong influence on what was prepared for meals. Mother was a tremendously effective support for Dad. It's really interesting that after Dad died, she was much more proactive. She came out into the public arena, which she had never done before. She was writing letters to the editor in the local papers and going to political meetings. She was really with it instead of just being quietly the homemaker for the man who was doing all of these important things.

MR. HUFFAKER: Could you talk a little bit about your work in Costa Rica, and what you've tried to get started there as an extension of what began here?

DR. LEOPOLD: Sure, that's easy. Growing up here was probably one of the most important experiments in restoration ecology. I went down to Costa Rico. I simply love that part of the world. I say was a mess things were in and how badly the land was treated. The tropical rain forests were being cut down and made into cow pastures. I guess nobody should be surprised that I thought it would be interesting to try restoring it. So with a group of three couples, originally from our social group in Ithaca, New York, we decided to go down and buy some property. We bought a piece, which was about 59 hectares, whatever that is. It's a little over 100 acres. We started trying to restore the tropical rain forest. An interesting side issue here is that searching the literature, I could find absolutely nothing on restoration of tropical forests, generally. There is information on restoration of dry tropical forests Dan Jansen and his work in Costa Rica being the number one person in this. But to restore the wet, tropical rainforest was quite another matter. The trees have grown up to over thirty meters high. Things are doing pretty well. The oldest plantings have crowned out. That is; the trees have formed a complete cover over the land. We have monkeys and big birds like Guans, and Chachelakas, and there are lots of bats. So the complexity of species is improving substantially and it even feels like a forest, so in a very real way it is.

[Tape skips]

...for an interpretation. As I perceive it, Dad was really hands off. And if I asked a question like; "What do you think I ought to major in at college?" I got nowhere. Nina on the other hand, feels that he was guiding us and guiding her into what she might specialize in at school. But it's just these mixtures, you know. Different people see the same thing different ways.

MR. HUFFAKER: Did your father have a vision for this property, or did it somewhat, "unfold"?

DR. LEOPOLD: Oh I think it somewhat unfolded. That's a simple choice! I am curious, I never heard him say, "We are really going to restore these natural vegetations." He didn't put it that way. But he would say, "You know, that's a beautiful view over here, and when we plant, we must keep that open space." Then, I heard him say, "The elms are going to die so this would be a very nice place to have a wet forest," in this little swale here, behind where we are sitting. But there's a distinction between him saying 'here's what we're going to do' and show that this could be done. I think it was that he was so excited about the changes that they were doing at the University of Wisconsin Arboretum that he felt that he wanted to do it too. That's sort of the center of it.

MR. HUFFAKER: Do you think he had a vision and that was just his leadership style, not to lay out explicitly [instructions]?

DR. LEOPOLD: Yes. That's very nicely said, yes. It's a leadership style. I remember, each of his took his course at the University. He wouldn't tell you what you needed to know. But he would sort of coach it in ways that would help lead you into seeing more. He would talk about reading the landscape and learning to read the landscape. He would use general leads into it without just telling you, this is the way it ought to be. I feel that he was doing quite exactly the same thing here; not telling his family "We're going to restore the forest! We're going to restore the prairies!" But you know, it's a really beautiful place. Can you see the difference?

MR. HUFFAKER: What would hope that this would look like in another fifty or a hundred years?

DR. LEOPOLD: I'd love for it to look exactly the way it looks now! I worry about the incursion of easy transportation. I worry about how we are very vulnerable to any kind of catastrophe like fire, or someone moving in and making a mess. But if fortune it with us, I really hope that this will stay with us as a tribute to this remarkable man, over a long period of time.

MR. HUFFAKER: Could I push you to talk a little bit more specifically then on what that means for the landscape? Some folks who would come wouldn't even understand. Even if they look at photographs, they haven't internalized, or witnessed the change as you have.

DR. LEOPOLD: Yes.

MR. HUFFAKER: So, the tribute is kind of embodied in the soil, so to speak.

DR. LEOPOLD: Yes, that's a nice way to put it.

MR. HUFFAKER: But yet, there is still an important story to tell about change and vegetation, especially in this somewhat critical time period when we can garner the wisdom and experience that you all had; and look to the future about what that means for the pines or the prairies and so forth. Can I push you a little bit more to respond specifically about how you think the landscape should continue to unfold, or should it not continue to unfold?

DR. LEOPOLD: Let's go back first to the 'landscape unfolding'. I like that. I think that by just absolute, sure, chance I got so interested in Dad's beautiful camera that I was taking pictures all over the place. So there is the opportunity to look at the ruination that was here when we started; and how it's converted into this simply gorgeous product. Our evidence that can reach people I hope, in terms of before and after comparisons of what is really intrinsic now, on this site. But extending out into the future I just don't know. I hope that we can use this property intelligently as a source of social information on how precious the land is and how it can inspire people. Also so how important it is in terms of not just our survival but also in terms of our appreciation of the world around us. I am nervous about watching my grandchildren growing up on concrete playgrounds, baseball courts, mowed parks with monocultured blue grass. Do we make the other options for young people now, to really get that close to the natural world that they get excited and enraptured by it? It's an uphill situation. As we become more and more urban our families are growing up in more and more isolation. Even getting your food in a basket. You push it around in the store and pick up the packages. That's very different than realizing that the corn that provides you with so much of your meals is a real product of the natural world. It's here, and it's a product of nature that is irreplaceable. Now we understand something about the stability of the climate being such an important factor resulting from the health of the natural world. All of a sudden, we realize that the tropics and the climates down there are really important for us here in the United States.

MR. HUFFAKER: What is one of your most favorite memories about your experience here and getting that connection to the natural world?

DR. LEOPOLD: I can't answer that directly, but I can say that...I can give you a clue about how or why the sense of excitement was generated. Lets go back to when I was

making a plant collection. I would bring in these fresh plants and show them to Dad with the identities all done and he would say, "That's wonderful! I had seen that, but I never knew what that was!" It had a big resonance! This was the kind of closeness with Dad that I found so inspiring. It was contagious. There was no alternative but that I was going to go into some part of Biology. I think, or I hope that I am representing what each of the siblings around me were going through to.

MR. HUFFAKER: Do you have a favorite place on the farm?

DR. LEOPOLD: Oh, that's a tough one. I don't know! I think that the birch row; the row of mixed pines and hardwoods just east of here ranks pretty high. That's really a beautiful walk at any time of the year. I think that it was very fortunate that Dad planned as a mix of hardwoods and pines and the meadows that the Aldo Leopold Foundation staff has been maintaining here in these open spaces. It's beautiful, beautiful prairie! So altogether, that's a particularly nice blend. If you press me, I would say that's my favorite place.

MR. HUFFAKER: Well, as we walk around a little bit, is there anything else you'd like to elaborate on Carl?

DR. LEOPOLD: I feel like I've been talking my arm off!

[Conversation continues as they walk]

MR. HUFFAKER: Are there any of these areas that you have specific memories about planting?

DR. LEOPOLD: The famous ones that we are coming in a minute, where I came out with a bucket full of pines. I stuck a whole bunch of pines on the north edge of this ridge. It turned out that Dad wanted to keep a place open. It's where you have a bench there now. He wanted to keep it open, so here's Carl, planting all of these damn pines! So he said to Nina, "No, let's not take them out. Carl planted those. In a few years, they'll be high enough so we can see out from under them." That's the way it is now. It was just about where this little sapling is now.

MR. HUFFAKER: That's a Red Bud I believe. I thought it was planted for your Mother.

DR. LEOPOLD: That's almost precisely where the Elm was that we had the tree house in. Then of course, you've probably heard that somebody would come driving in the driveway to visit and all of us kids would go tearing up into the tree house, so we didn't have to be in polite company! But we could listen in. We could check on what they were talking about.

MR. HUFFAKER: Do you remember the Elms dying?

DR. LEOPOLD: Oh yes.

MR. HUFFAKER: Was it due to Dutch elm disease?

DR. LEOPOLD: No. They were very old, and also there was the Gypsy Moth. I think it was Gypsy Moths that came in. They would absolutely defoliate them. There was nothing left. After about three or four years of being completely defoliated by the moths, that did them in.

MR. HUFFAKER: Do you remember what time frame that generally was?

DR. LEOPOLD: I would say it was about the time I left for school in 1941, they were almost dead. Some were already dead.

MR. HUFFAKER: How often did you come back here then, once you had begun pursuing your own career?

DR. LEOPOLD: Vacations would have a very strong magnetic affect! So I'd come back a lot. When I was in graduate school of course, that made a big difference. For four years I was off in the Pacific War. That had a big blank spot too.

...This was planned to be an orchard for Maple syrup. I am not sure if that's one of the Maples he planted. But there are some of them farther up here I think.

MR. HUFFAKER: Were they ever big enough to actually harvest?

DR. LEOPOLD: My sisters and I collected a lot of sap, but I think we got it from Red Maples mostly. We made syrup and it was barely acceptable, but it we'd say, "This is delicious syrup!" Everybody liked them; they said.

MR. HUFFAKER: How about when Nina and Charlie came back? Didn't they do some sugaring up here?

DR. LEOPOLD: I remember that they did. That was real maple syrup too! They used the maples that Dad had planted.

MR. HUFFAKER: How about the Cedar trees? Did they receive any attention, or have any importance?

DR. LEOPOLD: Of course, the mantle on the fireplace was one of these cedars. By and large the cedars have been left here because some of us have resisted taking them down! [Chuckling] You know there is all this tension between Nina and me. She says, "This pine should go because it's going to shade the Shack!" And I'll say, "No, no, no, don't cut any more!" So that goes on.

MR. HUFFAKER: That's really interesting; as a scientist, the personal attachment that we have to landscapes and living things: even the funny story about the turtle that you named.

DR. LEOPOLD: I have forgotten about that, yes! "Napoleon", that's kind of neat. I think this is an important part of children's growing up, and being close to the land. They personalize things; the pet turtle or the pet frog and this is, I think a device that draws people into an attachment to the natural community. So it's very good

... Probably gave up on the cropping. He deserted the place and a bootlegger came in. He set up his stills in the basement of the house right here. Fortunately, or unfortunately, the whiskey caught on fire one time and the house burned down, lock stock and barrel. When we bought the place, the metal rings that hold the barrels were all over the place. We saw a whole bunch of rings down here and wondered, 'what was that about?' It was from a bootlegger. It reverted for taxes and Dad bought it from the Bank.

MR. HUFFAKER: In thinking about how we would continue to take care of this special place, what kind of importance would you place on something like this? How important is it to maintain at least the skeleton?

DR. LEOPOLD: I think it's a nice emblem of the failure of an agricultural effort; this sandy soil is not really cropping soil. I don't think it is. So here is some poor soul really struggling for years I imagine, and having one failed cropped after another failed crop. He must have been consumed and just gave up. I think it's nice to have it here.

...see, Dad would be one to really get some syrup out of that.

MR. HUFFAKER: Yeah!

DR. LEOPOLD: ...[Near] the ceiling, we got that from the Wisconsin Conservation Commission or something like that. By the way, the farmer that lived here had an apple orchard, which was behind where you are standing. The only tree that survived is that one real old timer there. Nina has planted a whole bunch more apple trees, but I don't think any of them are doing very well.

MR. HUFFAKER: Is that where you originally had the garden?

DR. LEOPOLD: Yes, the first garden was on the other side of the shack. That was a big garden that Dad planted for birdseed. There was nothing like tomatoes or anything like that. It was whatever the birds could use. That was very poor, the soil was terrible. The yield was pretty bad. After some time, we put a garden in here and it didn't do very well either. We had a rail fence around it and that didn't keep the deer out of course. Anything that tried to grow was removed by the deer.

MR. SWENSON: At the time, how many deer were on the preserve?

DR. LEOPOLD: I wish I could tell you!

MR. SWENSON: Did you see them ever time you came up here, or very rarely?

DR. LEOPOLD: I would say very rarely.

MR. SWENSON: In all of your tromping through the wetlands and everything you never kicked up a lot of deer?

DR. LEOPOLD: We say deer, but it was not a lot. Then, when we'd go hunting...I trust you all know that the family was a great bow and arrow hunting family....and so there were times when we'd be sitting here in the marsh and having John, whatever his last name was, cutting a circuit to try and drive deer toward us. I got a shot one day that I almost fell over it was so exciting. I was standing by a willow thicket in the marsh just across Levee Road and Dad and John were cutting a circuit up by the ridge where Proctor/Bocox's property is and sure enough when they were almost back to where I was standing; and I had my bow all cocked and ready, a beautiful buck got up in the thicket were I was standing! I was standing there all this time! He was just playing coy! But when the two other men came, he took off and tore off to the right. You've heard of buck fever? Man, did I have it! So I drew my arrow and shot but it went right over the small of his back. There was nothing to take home except an exciting story.

He was a very knowledgeable person about biblical things. And he was not a person who was not really religious in the sense of an organized religion of any kind. But he really

could speak intelligently about many aspects of biblical people and situations. So it was really interesting to hear him speak about this “armeet from God” which was a paraphrase of one of the well known biblical sayings. I think that it was a biblical thing but I don’t know from where in the Bible. I am not that knowledgeable about it. But it’s a beautiful phrase it’s very touching and very revealing.

MR. SWENSON: So on Sundays, you were up here at the shack?

DR. LEOPOLD: Yeah, that’s right. Mother was a Roman Catholic. Brought up in the catholic tradition in New Mexico. So there was this problem about when you missed Mass on Sunday; then what? Mother became very relaxed about this. We talked about it. She said that she felt closed to God being here, than in the Church. And that’s the way that I feel too.

MR. HUFFAKER: Was this place always called “the meet rock”?

DR. LEOPOLD: No, that’s after the plaque was put there.

MR. HUFFAKER: And when was that?

DR. LEOPOLD: It was long after *The Sand County Almanac* came out. I think Nina had the plaque cut.

MR. SWENSON: I am thinking that Frank put this on in his time. Yeah.

MR. HUFFAKER: Well, was the rock some place where you would convene?

DR. LEOPOLD: No, this is a great big beautiful thing deposited by the glaciers. Isn’t it a dandy? So you treasure it. It’s probably quartzite from farther north, but I never tried checking it.

MR. SWENSON: Did you ever find artifacts out here? [tape skips] ...recently found like a three inch arrowhead and it is absolutely beautiful. It is a work of art. Did you ever find things like that out here?

MR. HUFFAKER: This was Levee Road was a Native American trail before it was a road.

DR. LEOPOLD: Sure it was. I am not sure if it was Nina or Estella, or who found it, but somebody picked up an arrowhead from the sand somewhere up here on this hill. It stayed for a long time with the journal up on that little shelf in the shack. But time goes by and now it’s gone. But yeah, that’s right.

I went out to a place on Leach Creek. There is a nice stand of Tamaracks over there. Dad and I went out and we dug several Tamaracks including some, quite unknowingly, a lot of poison sumac. The next morning I was pretty swollen all over the place. I was either five or six days in the hospital with this horrible attack of poison sumac. Now, I know better!

MR. HUFFAKER: Nina and Estella were telling the story of you stumbling upon the couple digging up your pines. Can you recount that story?

DR. LEOPOLD: I love it! I’ve told that story often. Dad and I were up here on this rise. I don’t remember what we were doing. We heard a sort of a click sound. It was a shovel.

I said, "That sounds like a shovel. Who's ...?" The two of us dropped what we were doing and we dropped down over the ridge. Here were two couples standing on our property. One woman with two of our white pines; their roots hanging out bare naked. And her spouse, I suppose, had the shovel and he was digging up another one! I guess you could expect that the adrenaline level in both Dad and me began to rise rather abruptly. I am sure I practically saw red; it was so infuriating that someone would come and dig up our beautiful pines! So anyhow Dad said, "*What are you doing?*" And the guy in the baseball cap with the shovel said, "We're just...we're not going to kill them, we were just taking these home to plant." Dad said, with his voice going higher, "*What right do you have to do that?*" He fell repeated and said that they were going to take them home and plant them. Dad said something like "jesus Christ!" or "My god!" or something like that. I'm not sure, but it was something pretty fierce. The guy with the shovel said, "Please, there are ladies present." Now for a man who was an expert on ethics this was a neat twist! That's a serious moral issue. You can be terrible if you don't have ladies present. We are standing there and Dad sort of staggered back as if he had some sort of incredible joke. He leaned against a tree and just laughed with this great roaring laughter! These poor guys were standing there with the trees and the shovel and instead of blasting at them, which I would have done, I am sure. Dad was just laughing. The man said, "What shall I do with them?" And Dad said, "*Put them back in the ground!*" They [the trees] died of course.

[Short unintelligible portion]

They just aren't very happy here. On our property in New York we've got trees with this kind of girth that would be beautiful straight bowls going up yards and a nice clean.....[unintelligible]...Black Oak bark which is really very beautiful. It's a very tight pattern. It could be much more of a pattern of tight triangles that accumulate at the tree grows older. I love my Black Oaks in the yard, but I certainly don't have that kind of affinity for the ones here.

MR. HUFFAKER: We've had some differing stories about this little spot here and whether it was intentionally kept open or not and if this is where draba [?] was found.

DR. LEOPOLD: Yes, both of those are true. In the photograph of that first time that we came here this was a nice big sand blow and there were no trees around it at all. Besides draba, there was another little, oh what in the hell family? Anyway there were some unique plants here; unusual species. That was very special to Dad. He said we should keep all the trees away from it and keep it open and keep it a habitation for them.

MR. HUFFAKER: What do you think about when you see it now? Obviously it's not a sand blow any more.

DR. LEOPOLD: No, and it's too bad because now it really doesn't fill the need at all as a site for unusual plants. It's just sort of a blank spot.

MR. HUFFAKER: One of the things we've talked about is coming in and clearing the Black Oaks out and opening it back up.

DR. LEOPOLD: I would vote for it. I think that would be a good idea.

MR. HUFFAKER: And we'll see whether the draba can respond just from the seed bank, or perhaps we'll actually have to collect some and replant them.

DR. LEOPOLD: That's great. I can claim the responsibility for draba because it was one of the plants I collected here. Dad had said that he had never even seen this. So I was very proud when the little essay on draba came out. Because yeah, I had something to do with that!

MR. SWENSON: This sort of thing sort of begs the question about what attitude we carry forward when we think about maintaining this as a cultural or ecological site? You bring up the tamaracks that are down in the lowland. If you look at them, they're not doing very well. They would probably benefit from some thinning around them.

DR. LEOPOLD: They might, but it seems hopeless down there. But your basic question about whether to have something from old times or whether it should be something ecological sensible; I'd vote for the ecologically sensible approach. What's an appropriate floral composition here now that's it's changed? I like what you are saying. That's good, Steve.

We did stop to speak about the Hackberries. There were a couple of Hackberries that Dad put in right there where the hard maples are. Hackberry was one of Dad's favorite hardwoods. He loved a Hackberry. It's fun to see that they are doing pretty well. There's one tree that's really nice. I have them on my place in New York.

MR. HUFFAKER: Where would you find things like Hackberry? Would transplant them from other places on the landscape?

DR. LEOPOLD: No, I think Dad found Hackberry here. I don't remember that anybody was growing them.

MR. HUFFAKER: In one of your journals you talk about planning Aspen and Sumac and Hazelnut. Where would you find those resources? Did they come from the state as well, or did you...?

DR. LEOPOLD: No, a lot of those hardwoods came from just scrounging them out of the neighborhood. It's easy to get Aspen and things like Sumac and Hazel. There was a Hazel bush where the driveway is now that was there from the time "go" back in 1934 or 1935. And you did right to kill it Steve. That was good.

MR. SWENSON: Oh really? I was actually disappointed that it got killed. Nina hired one of the interns to do it.

MR. HUFFAKER: Is it totally dead?

MR. SWENSON: No, you're not going to kill that stuff. But it was getting pretty big.

DR. LEOPOLD: It was too much! In the early days, it was just a little clump of hazel.

MR. HUFFAKER: How about the Sweet Fern?

DR. LEOPOLD: Oohhh! That's a little embarrassing. On a trip up to Necedah where Dad had a Graduate student working who was working on Rough Grouse or Prairie Chickens, I can't remember [Art Hawkins?]. He came back with a collection of the Sweet Fern. It had not gotten started here at all. We went out and planted that all along the sand ridge here. Now, do we ever wish we had not done that?! You know you make some mistakes! But it's too bad; it's too aggressive. It really moves out much too fast in spreading out into places where you didn't want it.

MR. SWENSON: I am looking for a good example here. Right here off to our left Carl. What he said is that Red Pines don't do a very good job of self-thinning.

DR. LEOPOLD: Ah, that makes sense!

MR. SWENSON: They just grow taller and more spindly. You end up with somewhat transparent crowns that just don't have enough density to really create a vigorous tree. So what ends up happening is that low level of vigor among all six of those because it's too dense results in them succumbing to natural stressors that otherwise a healthy tree wouldn't succumb to.

DR. LEOPOLD: Yes, I see. That's makes sense. You see some trees that have a wider spacing and they are sturdy. They had a tighter crown.

MR. SWENSON: Yeah, they are doing much better. So his recommendation is to thin out. I guess he would take one of these two in the middle that are quite small and have pretty poor crowns and leave the rest that have the better crowns.

DR. LEOPOLD: That makes sense. And you know, for me to say that it means something.

MR. SWENSON: Yeah, we have that on film!

DR. LEOPOLD: I resist cutting anything! Those are out trees!

MR. HUFFAKER: Carl, I've heard the story here with these two trees that you guys were having such a hard time getting anything established that you began to plant two or three trees in the same hole. That looks to me like one of the cases where you planted two trees together and they both finally started growing.

DR. LEOPOLD: Well, you know everybody sees things differently, especially from an historical time. There were intervals when we did sometimes put two close together. Sometimes it was because there would be a shade producing birch or a thicket of raspberries or blackberries. We'd put a couple of trees in this little close thicket. When those were planted, there were probably about two feet apart. It happened here and there sometimes. But we had had such bad luck with losing too many trees in the early planting years that sometimes our spacing was a little close.

MR. HUFFAKER: What do you think as we look at these, as you said, beautiful Red Pines? You can hardly find a little guy popping up. We're getting absolutely no recruitment.

DR. LEOPOLD: It's amazing because I've had the feeling that maybe ten years ago I was seeing some maybe real activity in terms of new seedlings coming in. But I don't see it. Are the deer cutting them down?

MR. SWENSON: That's our suspicion, as well as light levels being just too low.

DR. LEOPOLD: I'll bet that's right.

MR. SWENSON: Red Pine really needs more light to get established as a seedling.

MR. HUFFAKER: One of the things we've thought about is that if we, in some selected places, do some removal in an area like that where you can see an opening in the canopy over there, we may want to come in with seedlings, or perhaps wait a year or two to see if we get any recruitment. This is an area where it seems like we would want to maintain a pretty strong pine presence and to maintain the character of what you guys initially did.

DR. LEOPOLD: Absolutely! And Buddy, you know under about six feet of sand there is this gorgeous red clay that is very sturdy and very water retentive. So that's I think one reason why the red pines do so well here. They go down and there is this gorgeous source of moisture and footing. Yeah, I say let's try and keep it as a red pine stand. It would be great.

We were cutting an awful lot of wood those days. We were cutting yards and yards of firewood and stack it by the shack. I don't know who cut the wood. I don't remember who was there for cutting the good oak up and I suspect it was a fairly small tree by standards of what we are seeing here now.

It didn't go back as far as Dad's historical review went but that's okay.

MR. HUFFAKER: One of the neat things I think about that is that is that it was once just....

[tape skips frequently here]

DR. LEOPOLD: Then, all of a sudden you read this essay and you say, 'Yes, of course!'

MR. HUFFAKER: Like the draba, it was Herbarium samples.

MR. SWENSON: It took up very little space on the page.

DR. LEOPOLD: Yes, and with a sensible wooly coat! Oh, I love that! That bridge over there is another place that just belongs to have a stand of red pines mixed with some hardwoods. You could see the clay underneath it. We used to actually dig some of the clay out for an elementary kind of pottery. I remember digging some out on this cut right here and modeling some primitive kinds of things that were not worth keeping!

MR. SWENSON: Did you use it for floor in the shack as well?

DR. LEOPOLD: That's right! Now where did we get that clay? I think the clay for the floor came from right here. I think it was.

MR. SWENSON: How much traffic was on this road back then?

DR. LEOPOLD: Almost none. The Gilberts, who lived below us downstream, had no transportation.

[Tape skips to sounds of nature; birds, water flowing, crickets and other bugs, wind blowing—conversation ends]